

WHAT IS CLAIMED IS:

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1. A consumer response analysis system comprising:
    - a targetable television system including head end means, a signal distribution arrangement and a plurality of television receivers for viewing by consumers, said head end means including means for transmitting normal television program signals and substitute television program signals on a plurality of distribution trunks connected by the signal distribution arrangement to said plurality of television receivers, each television receiver being connected to one of the distribution trunks preselected so that a plurality of receivers connected to at least one of the distribution trunks demographically represents the community for market research purposes, the head end including means for selectively substituting substitute program signals in lieu of normal television program signals for transmission of a substitute program on one of the distribution trunks to the plurality of the television receivers connected thereto for consumer viewing;
    - a plurality of product sales collection units each for collecting information representing purchases by the consumers at one of a plurality of stores and for generating product identifying signals identifying the products purchased and the sales collection unit collecting the information, each sales collection unit predominately collecting purchase information by consumers viewing receivers connected to the same distribution trunk, whereby the system is closed between the targetable television system and the product sales collection units by the acts of the consumers viewing the programs presented on the respective television receivers and shopping in a store including a sales collection unit; and
    - a market research computer system including data for identifying the particular sales collection

units associated with each of the distribution trunks and responding to said transaction response signals to provide an indication of consumer behavior in response to said normal and substitute programs.

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2. A consumer response analysis system in accordance with claim 1 comprising controller apparatus for controlling signal substitution on the distribution trunks and for identifying such substitution to the  
10 market research computer system.

3. A consumer response analysis system in accordance with claim 2 wherein the consumers are distributed throughout a viewer community and the distribution means comprise means for splitting the  
15 signals on each distribution trunk into a plurality of substantially identical copies and for conveying the signal copies by fiber optic means to geographically grouped consumers.

4. A consumer response analysis system in  
20 accordance with claim 3, wherein each sales collection unit is located in a store shopped predominately by consumers from one of the geographic areas.

5. A method for use in a consumer response analyzing system comprising apparatus for distributing  
25 television programming to a plurality of zones in a community of consumers and consumer data collection points located in stores in the zones for collecting consumer purchase data, the method comprising:

associating one of the zones with each consumer  
30 data collection point, said association being made when a majority of purchases at a particular data collection point are made by consumers from one of the zones;

assigning each consumer data collection point a unique identifying address;

presenting television programming to the community so that a substitute program is presented to the consumers in a first set of zones and normal programming is presented to consumers in a second set of zones;

5                    accumulating consumer purchase data from the consumer data collection points along with the identifying address of each consumer data collection point providing accumulated consumer purchase data; and

10                  analyzing the collected data of the consumer data collection points identified as being associated with a zone receiving the substitute program and the collected data identified as being associated with a zone receiving the normal programming to identify the market 15 significance of the substitute programming.

6. A method in accordance with claim 5 comprising:

identifying consumer data collection points in the community which are located in stores where a 20 majority of the purchases are made by consumers from one of the zones; and

storing in a computer memory information associating the consumer data collection points identified in the identifying step with the zone 25 including the consumers making the majority of purchases.

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7. A method in accordance with claim 2 comprising storing in the computer, demographic data describing the type of a store in which each consumer data collection point is located, and wherein the 30 analyzing step comprises identifying market significance based in part on the computer stored demographic data.

8. A method in accordance with claim 7 comprising only data accumulated from consumer data collection points located in stores having similar 35 demographic data description.

9. A television distribution and analysis system for delivering a plurality of channel signals in separated TV channels to a plurality of cable television subscribers residing in a geographic area comprising:
- 5            a plurality of normal channel signal sources for producing normal TV channel signals to be delivered to subscribers;
- a source of a substitute channel signal to be substituted for at least one normal channel signal;
- 10          signal distribution circuitry for receiving the normal channel signals and the substitute channel signal and for combining the received channel signals into a spectrum of channels on a plurality of distribution trunks, the spectrum of channels on less than all of the
- 15          plurality of distribution trunks including the substitute channel signal; and
- means for generating a plurality of substantially identical copies of the spectrum of channels of each distribution trunk;
- 20          means for connecting the substantially identical copies of the channel spectrum of each distribution trunk to different substantially contiguous zones of the geographic area;
- a plurality of customer purchase data
- 25          collectors for collecting customer purchase data in stores of the geographic area, each customer purchase data collector representing purchases made by subscribers residing in one of the zones; and
- a data analysis computer system for
- 30          accumulating customer purchase data from the data collectors and for analyzing the collected data to identify the market significance of the normal and substitute channel signals connected to the zones of the geographic area.
- 35          10. The television distribution and analysis system of claim 9 wherein each customer purchase data collector is located in a store a majority of whose

purchasers are subscribers in one of the zones and the data analysis computer comprises memory for storing for each customer purchase data collector, the identity of the zone including the collector.

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11. The television distribution and analysis system of claim 9 wherein the means for connecting connects the spectrum of channel signals from one of the distribution trunks to zones of the community separated from one another by zones connected to others of the 10 distribution trunks and selected to demographically represent the community for market research purposes.

12. A television distribution and analysis system in accordance with claim 9 wherein the zones connected to at least one distribution trunk are selected 15 to demographically represent the community for market research purposes.

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13. A television distribution and analysis system in accordance with claim 9 wherein the connecting means comprises fiber optic means for connecting the 20 substantially identical copies of the channel spectrum of each distribution trunk to different ones of the zones.

14. A television distribution and analysis system in accordance with claim 9 comprising a plurality of first signal combiners equal in number to the number 25 of distribution trunks each first signal combiner receiving as inputs first channel modulated normal signals for which no signal substitution is performed and second channel modulated signals including normal signals and at least one substitute signal.

30 15. A television distribution and analysis system in accordance with claim 14 wherein the channels of the first channel modulated signals are distinct from the second channel modulated signals.

16. A television distribution and analysis system in accordance with claim 15 comprising:

a video switch apparatus for receiving as inputs, normal channel signals and substitute channel  
5 signals and for selectively connecting the input signals to a plurality of output ports of the video switch; and  
circuitry for combining the signals at the output ports into a plurality of cable television channel spectrums equal to the number of distribution trunks.

10 17. A television distribution and analysis system in accordance with claim 16 comprising a plurality of channel modulators each connected to an output of the video switch, the channel modulators comprising a number of modulators equal to the number of distribution trunks  
15 for each channel of the second channel modulated signals.

18. A television distribution and analysis system in accordance with claim 9 comprising:

a video switch apparatus for receiving as inputs, normal channel signals and substitute channel  
20 signals and for selectively connecting the input signals to a plurality of output ports of the video switch; and  
circuitry for combining the signals at the output ports into a plurality of cable television channel spectrums equal to the number of distribution trunks.

25 19. A television distribution and analysis system in accordance with claim 18 comprising a plurality of channel modulators each connected to an output of the video switch.

20. A television distribution and analysis  
30 system in accordance with claim 9 comprising:  
a plurality of first signal conductors each for conveying a single channel modulated normal television signal;

at least one second signal conductor for conveying a single channel modulated substituted television signal; and

- 5 signals from the first signal conductors and the second signal conductor for selectively connecting signals from predefined ones of the first and second signal conductors to the distribution trunks.

21. A television distribution and analysis  
10 system in accordance with claim 20 wherein the switched combiner unit comprises a switched combiner for providing signals to each of the distribution trunks.

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22. A method for use in a consumer response analyzing system comprising apparatus for distributing television to a plurality of zones in a community of consumers and a market research computer system, the method comprising:

- identifying a consumer parameter of consumers in the community and associating one of the zones of the 20 community with the consumer parameters of a plurality of consumers;

storing in the market research computer system data representing the associations between consumer parameters and zones;

- 25 presenting television programming to the community so that a substitute program is presented to the consumers in a first set of zones and normal programming is presented to consumers in a second set of zones;

- 30 conducting a survey of a plurality of consumers throughout the community to identify their customer parameter and to identify consumer purchase data; and  
35 analyzing the survey identified data in the market research computer system to associate each consumer purchase data with one of the zones to identify the market significance of substitute programming.

23. A method in accordance with claim 22 comprising:

identifying consumer telephone numbers as consumer parameters and associating each identified consumer telephone number with the zone including that telephone number; and

storing in the market research computer system data representing associations between consumer telephone numbers and the zones including the identified telephone numbers.

24. A method in accordance with claim 22 comprising:

identifying consumer addresses as consumer parameters and associating each identified consumer address with the zone including that consumer address; and

storing in the market research computer system data representing associations between consumer addresses and the zones including the identified consumer addresses.

25. A method in accordance with claim 22 comprising:

identifying consumer names as consumer parameters and associating each identified consumer name with the zone including that consumer name identified; and

storing in the market research computer system data representing the associations between consumer names and the zones including the identified consumer names.